

	b_7	b_6	b_5	b_4	b_3	b_2	b_1	b_0
Lokasi Ingatan 1800 (heks)	d	c	b	a	dp	g	f	e

Rajah 2: Sambungan ruas untuk paparan SDK-85.

0	1	2	3	4	5
---	---	---	---	---	---

Rajah 3: Penomboran (numbering) bagi paparan SDK-85.

Perhatian:

Bagi mengaktifkan sesuatu paparan sebelum menghantarkan data, anda perlu menempatkan nombor paparan campur 80 (heks) di lokasi ingatan 1900.

(60/100)

3. (a) Terangkan apa langkah yang dilakukan oleh mikro-pemproses apabila ia disampukkan/interup (interrupt).

(30/100)

- (b) Apakah perbezaan di antara arahan-arahan kembali dari sampukan (RTI) dan kembali dari subrutin (RTS)? Adakah arahan-arahan ini melakukan fungsi yang sama bagi semua mikropemproses?

(30/100)

- (c) Tulis suatu urutan arahan dalam bahasa Asembli bagi ENABLE sampukan RST 6.5, tanpa mengubah keadaan (state) ENABLE/DISABLE pada talian-talian sampukan yang lain. Jelaskan jawapan anda.

(40/100)

4. (a) (i) Tukar nombor desimal 128 kepada nombor 8421 BCD yang setara.

- (ii) Cari pelengkap duaan bagi nombor-nombor desimal 127, 128, -127 dan -128.

- (iii) Cari nombor desimal yang setara dengan nombor 101001.1010_2 .

- (iv) Dengan menggunakan penolakan pelengkap binari, kira penolakan berikut:

$$3AFA_{16} - 2F1B_{16}$$

Berikan jawapan anda dalam Heksadesimal.

308

(40/100)

...3/-

```
(b)          MVI    B,4
              LXI    H,2042H
              SUB    A
LOOP:         ADD    M
              INX    H
              DCR    B
              JNZ    LOOP
              STA    2040H
              RST    1
```

Data-data untuk digunakan oleh program di atas,
ditempatkan pada lokasi-lokasi ingatan berikut:

```
(2042) = 07
(2043) = 23
(2044) = 31
(2045) = 20
```

- (i) Terangkan secara ringkas, apakah tujuan program tersebut?
- (ii) Tentukan kandungan dalam lokasi ingatan 2040H selepas program in dieksekusikan. Tunjukkan langkah-langkah dalam memperolehi jawapan anda.

(40/100)

- (c) Tulis satu program bagi menentukan pelengkap satuan (one's-complement). Katakan, data disimpan di lokasi ingatan 2040H dan selepas program dieksekusikan, keputusannya tersimpan di lokasi 2041H.

(20/100)

5. (a) Terangkan apakah yang dimaksudkan dengan:

- (i) Antara muka
- (ii) Bufer
- (iii) ADC (Analog-to-Digital Converter)

(15/100)

- (b) Nyatakan 2 jenis Antara muka Perkakasan Digital dan berikan contoh-contoh antara muka berkenaan yang paling banyak digunakan kini serta penggunaan-penggunaannya.

(20/100)

...4/-

- (c) Terangkan mengenai bas antara muka IEEE 488 dan apakah parameter-parameter komunikasi yang disetkan bagi piawai ini.

(25/100)

- (d) Huraikan dengan bersertakan gambarajah, operasi berjabat-tangan (handshake) pada GPIB.

(40/100)

- 0000000 -

March 1979

INTEL JAPAN CORPORATION
Flower Hill-Shinmachi East Bldg
1-23-9, Shinmachi, Setagaya-ku
Tokyo 154, Japan
Tel. (03) 426-9261

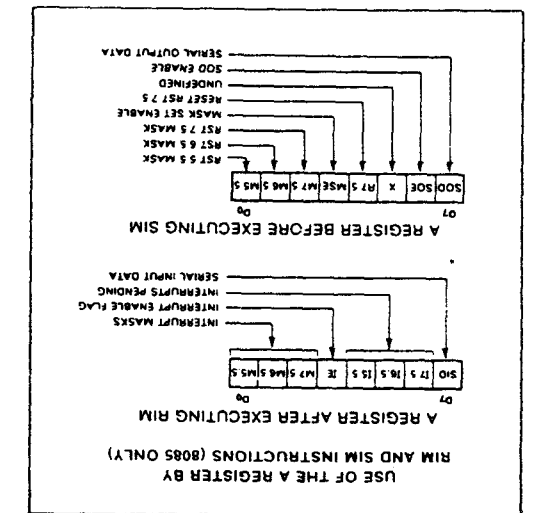


Printed in U.S.A./A348/0481/100K BL

Notes 1 This is MOV A,M 2 This is MOV M,A 3 This is JMP

Move	Move (cont)	Move
A, byte 7F	E, A, 5F	A, byte 3E
A, byte 78	E, B, 58	B, byte 0E
A, byte 79	E, C, 59	C, byte 06
A, byte 7A	E, D, 5A	D, byte 0E
A, byte 7B	E, E, 5B	E, byte 1E
A, byte 7C	E, H, 5C	H, byte 2E
A, byte 7D	E, L, 5D	L, byte 2E
A, byte 7E	E, M, 5E	M, byte 3E
B, byte 47	H, A, 67	A, byte 3E
B, byte 48	H, B, 68	B, byte 0E
B, byte 49	H, C, 69	C, byte 06
B, byte 4A	H, D, 6A	D, byte 0E
B, byte 4B	H, E, 6B	E, byte 1E
B, byte 4C	H, H, 6C	H, byte 2E
B, byte 4D	H, L, 6D	L, byte 2E
B, byte 4E	H, M, 6E	M, byte 3E
C, byte 4F	L, A, 6F	A, byte 3E
C, byte 50	L, B, 68	B, byte 0E
C, byte 51	L, C, 69	C, byte 06
C, byte 52	L, D, 6A	D, byte 0E
C, byte 53	L, E, 6B	E, byte 1E
C, byte 54	L, H, 6C	H, byte 2E
C, byte 55	L, L, 6D	L, byte 2E
C, byte 56	L, M, 6E	M, byte 3E
D, byte 57	M, A, 77	A, byte 3E
D, byte 58	M, B, 70	B, byte 0E
D, byte 59	M, C, 71	C, byte 06
D, byte 5A	M, D, 72	D, byte 0E
D, byte 5B	M, E, 73	E, byte 1E
D, byte 5C	M, H, 74	H, byte 2E
D, byte 5D	M, L, 75	L, byte 2E
D, byte 5E	M, M, 76	M, byte 3E
D, byte 5F	M, M, 77	M, byte 3E

DATA TRANSFER GROUP



RESTART TABLE

Register Address	Code	Name
0000	C7	RST 0
0001	CF	RST 1
0008	D7	RST 2
0010	E7	RST 3
0018	0F	RST 4
0020	1F	RST 5
0028	2F	RST 6
0030	3F	RST 7
0038	4F	RST 7.5
003C	5F	Hardware Function
0040	6F	Hardware Function
0048	7F	Hardware Function
0050	8F	Hardware Function
0058	9F	Hardware Function
0060	AF	Hardware Function
0068	BF	Hardware Function
0070	CF	Hardware Function
0078	DF	Hardware Function
0080	EF	Hardware Function
0088	FF	Hardware Function
0090	00	Hardware Function
0098	10	Hardware Function
00A0	20	Hardware Function
00A8	30	Hardware Function
00B0	40	Hardware Function
00B8	50	Hardware Function
00C0	60	Hardware Function
00C8	70	Hardware Function
00D0	80	Hardware Function
00D8	90	Hardware Function
00E0	A0	Hardware Function
00E8	B0	Hardware Function
00F0	C0	Hardware Function
00F8	D0	Hardware Function
0100	E0	Hardware Function
0108	F0	Hardware Function
0110	01	Hardware Function
0118	11	Hardware Function
0120	21	Hardware Function
0128	31	Hardware Function
0130	41	Hardware Function
0138	51	Hardware Function
0140	61	Hardware Function
0148	71	Hardware Function
0150	81	Hardware Function
0158	91	Hardware Function
0160	A1	Hardware Function
0168	B1	Hardware Function
0170	C1	Hardware Function
0178	D1	Hardware Function
0180	E1	Hardware Function
0188	F1	Hardware Function
0190	02	Hardware Function
0198	12	Hardware Function
01A0	22	Hardware Function
01A8	32	Hardware Function
01B0	42	Hardware Function
01B8	52	Hardware Function
01C0	62	Hardware Function
01C8	72	Hardware Function
01D0	82	Hardware Function
01D8	92	Hardware Function
01E0	A2	Hardware Function
01E8	B2	Hardware Function
01F0	C2	Hardware Function
01F8	D2	Hardware Function
0200	E2	Hardware Function
0208	F2	Hardware Function
0210	03	Hardware Function
0218	13	Hardware Function
0220	23	Hardware Function
0228	33	Hardware Function
0230	43	Hardware Function
0238	53	Hardware Function
0240	63	Hardware Function
0248	73	Hardware Function
0250	83	Hardware Function
0258	93	Hardware Function
0260	A3	Hardware Function
0268	B3	Hardware Function
0270	C3	Hardware Function
0278	D3	Hardware Function
0280	E3	Hardware Function
0288	F3	Hardware Function
0290	04	Hardware Function
0298	14	Hardware Function
02A0	24	Hardware Function
02A8	34	Hardware Function
02B0	44	Hardware Function
02B8	54	Hardware Function
02C0	64	Hardware Function
02C8	74	Hardware Function
02D0	84	Hardware Function
02D8	94	Hardware Function
02E0	A4	Hardware Function
02E8	B4	Hardware Function
02F0	C4	Hardware Function
02F8	D4	Hardware Function
0300	E4	Hardware Function
0308	F4	Hardware Function
0310	05	Hardware Function
0318	15	Hardware Function
0320	25	Hardware Function
0328	35	Hardware Function
0330	45	Hardware Function
0338	55	Hardware Function
0340	65	Hardware Function
0348	75	Hardware Function
0350	85	Hardware Function
0358	95	Hardware Function
0360	A5	Hardware Function
0368	B5	Hardware Function
0370	C5	Hardware Function
0378	D5	Hardware Function
0380	E5	Hardware Function
0388	F5	Hardware Function
0390	06	Hardware Function
0398	16	Hardware Function
03A0	26	Hardware Function
03A8	36	Hardware Function
03B0	46	Hardware Function
03B8	56	Hardware Function
03C0	66	Hardware Function
03C8	76	Hardware Function
03D0	86	Hardware Function
03D8	96	Hardware Function
03E0	A6	Hardware Function
03E8	B6	Hardware Function
03F0	C6	Hardware Function
03F8	D6	Hardware Function
0400	E6	Hardware Function
0408	F6	Hardware Function
0410	07	Hardware Function
0418	17	Hardware Function
0420	27	Hardware Function
0428	37	Hardware Function
0430	47	Hardware Function
0438	57	Hardware Function
0440	67	Hardware Function
0448	77	Hardware Function
0450	87	Hardware Function
0458	97	Hardware Function
0460	A7	Hardware Function
0468	B7	Hardware Function
0470	C7	Hardware Function
0478	D7	Hardware Function
0480	E7	Hardware Function
0488	F7	Hardware Function
0490	08	Hardware Function
0498	18	Hardware Function
04A0	28	Hardware Function
04A8	38	Hardware Function
04B0	48	Hardware Function
04B8	58	Hardware Function
04C0	68	Hardware Function
04C8	78	Hardware Function
04D0	88	Hardware Function
04D8	98	Hardware Function
04E0	A8	Hardware Function
04E8	B8	Hardware Function
04F0	C8	Hardware Function
04F8	D8	Hardware Function
0500	E8	Hardware Function
0508	F8	Hardware Function
0510	09	Hardware Function
0518	19	Hardware Function
0520	29	Hardware Function
0528	39	Hardware Function
0530	49	Hardware Function
0538	59	Hardware Function
0540	69	Hardware Function
0548	79	Hardware Function
0550	89	Hardware Function
0558	99	Hardware Function
0560	A9	Hardware Function
0568	B9	Hardware Function
0570	C9	Hardware Function
0578	D9	Hardware Function
0580	E9	Hardware Function
0588	F9	Hardware Function
0590	0A	Hardware Function
0598	1A	Hardware Function
05A0	2A	Hardware Function
05A8	3A	Hardware Function
05B0	4A	Hardware Function
05B8	5A	Hardware Function
05C0	6A	Hardware Function
05C8	7A	Hardware Function
05D0	8A	Hardware Function
05D8	9A	Hardware Function
05E0	AA	Hardware Function
05E8	BA	Hardware Function
05F0	CA	Hardware Function
05F8	DA	Hardware Function
0600	EA	Hardware Function
0608	FA	Hardware Function
0610	0B	Hardware Function
0618	1B	Hardware Function
0620	2B	Hardware Function
0628	3B	Hardware Function
0630	4B	Hardware Function
0638	5B	Hardware Function
0640	6B	Hardware Function
0648	7B	Hardware Function
0650	8B	Hardware Function
0658	9B	Hardware Function
0660	AB	Hardware Function
0668	BB	Hardware Function
0670	CB	Hardware Function
0678	DB	Hardware Function
0680	EB	Hardware Function
0688	FB	Hardware Function
0690	0C	Hardware Function
0698	1C	Hardware Function
06A0	2C	Hardware Function
06A8	3C	Hardware Function
06B0	4C	Hardware Function
06B8	5C	Hardware Function
06C0	6C	Hardware Function
06C8	7C	Hardware Function
06D0	8C	Hardware Function
06D8	9C	Hardware Function
06E0	AC	Hardware Function
06E8	BC	Hardware Function
06F0	CC	Hardware Function
06F8	DC	Hardware Function
0700	EC	Hardware Function
0708	FC	Hardware Function
0710	0D	Hardware Function
0718	1D	Hardware Function
0720	2D	Hardware Function
0728	3D	Hardware Function
0730	4D	Hardware Function
0738	5D	Hardware Function
0740	6D	Hardware Function
0748	7D	Hardware Function
0750	8D	Hardware Function
0758	9D	Hardware Function
0760	AD	Hardware Function
0768	BD	Hardware Function
0770	CD	Hardware Function
0778	DD	Hardware Function
0780	ED	Hardware Function
0788	FD	Hardware Function
0790	0E	Hardware Function
0798	1E	Hardware Function
07A0	2E	Hardware Function
07A8	3E	Hardware Function
07B0	4E	Hardware Function
07B8	5E	Hardware Function
07C0	6E	Hardware Function
07C8	7E	Hardware Function
07D0	8E	Hardware Function
07D8	9E	Hardware Function
07E0	AE	Hardware Function
07E8	BE	Hardware Function
07F0	CE	Hardware Function
07F8	DE	Hardware Function
0800	EE	Hardware Function
0808	FE	Hardware Function
0810	0F	Hardware Function
0818	1F	Hardware Function
0820	2F	Hardware Function
0828	3F	Hardware Function
0830	4F	Hardware Function
0838	5F	Hardware Function
0840	6F	Hardware Function
0848	7F	Hardware Function
0850	8F	Hardware Function
0858	9F	Hardware Function
0860	AF	Hardware Function
0868	BF	Hardware Function
0870	CF	Hardware Function
0878	DF	Hardware Function
0880	EF	Hardware Function
0888	FF	Hardware Function
0890	10	Hardware Function
0898	20	Hardware Function
08A0	30	Hardware Function
08A8	40	Hardware Function
08B0	50	Hardware Function
08B8	60	Hardware Function
08C0	70	Hardware Function
08C8	80	Hardware Function
08D0	90	Hardware Function
08D8	A0	Hardware Function
08E0	B0	Hardware Function
08E8	C0	Hardware Function
08F0	D0	Hardware Function
08F8	E0	Hardware Function
0900	F0	Hardware Function
0908	11	Hardware Function
0910	21	Hardware Function
0918	31	Hardware Function
0920	41	Hardware Function
0928	51	Hardware Function
0930	61	Hardware Function
0938	71	Hardware Function
0940	81	Hardware Function
0948	91	Hardware Function
0950	A1	Hardware Function
0958	B1	Hardware Function
0960	C1	Hardware Function
0968	D1	Hardware Function
0970	E1	Hardware Function
0978	F1	Hardware Function
0980	12	Hardware Function
0988	22	Hardware Function
0990	32	Hardware Function
0998	42	Hardware Function
09A0	52	Hardware Function
09A8	62	Hardware Function
09B0	72	Hardware Function
09B8	82	Hardware Function
09C0	92	Hardware Function
09C8	A2	Hardware Function
09D0	B2	Hardware Function
09D8	C2	Hardware Function
09E0	D2	Hardware Function
09E8	E2	Hardware Function
09F0	F2	Hardware Function
09F8	13	Hardware Function
0A00	23	Hardware Function
0A08	33	Hardware Function
0A10	43	Hardware Function
0A18	53	Hardware Function
0A20	63	Hardware Function
0A28	73	Hardware Function
0A30	83	Hardware Function
0A38	93	Hardware Function
0A40	A3	Hardware Function
0A48	B3	Hardware Function
0A50	C3	Hardware Function
0A58	D3	Hardware Function
0A60	E3	Hardware Function
0A68	F3	Hardware Function
0A70	14	Hardware Function
0A78	24	Hardware Function
0A80	34	Hardware Function
0A88	44	Hardware Function
0A90	54	Hardware Function
0A98	64	Hardware Function
0AA0	74	Hardware Function
0AA8	84	Hardware Function
0AB0	94	Hardware Function
0AB8	A4	Hardware Function
0AC0	B4	Hardware Function
0AC8	C4	Hardware Function
0AD0	D4	Hardware Function
0AD8	E4	Hardware Function
0AE0	F4	Hardware Function
0AE8	15	Hardware Function
0AF0	25	Hardware Function
0AF8	35	Hardware Function
0B00	45	Hardware Function
0B08	55	Hardware Function
0B10	65	Hardware Function
0B18	75	Hardware Function
0B20	85	Hardware Function
0B28	95	Hardware Function
0B30	A5	Hardware Function
0B38	B5	Hardware Function
0B40	C5	Hardware Function
0B48	D5	Hardware Function
0B50	E5	Hardware Function
0B58	F5	Hardware Function
0B60	16	Hardware Function
0B68	26	Hardware Function
0B70	36	Hardware Function
0B78	46	Hardware Function
0B80	56	Hardware Function
0B88	66	Hardware Function
0B90	76	Hardware Function
0B98	86	Hardware Function
0BA0	96	Hardware Function
0BA8	A6	Hardware Function
0BB0	B6	Hardware Function
0BB8	C6	Hardware Function
0BC0	D6	Hardware Function
0BC8	E6	Hardware Function
0BD0	F6	Hardware Function
0BD8	17	Hardware Function
0BE0	27	Hardware Function
0BE8	37	Hardware Function
0BF0	47	Hardware Function
0BF8	57	Hardware Function
0C00	67	Hardware Function
0C08	77	Hardware Function
0C10	87	Hardware Function
0C18	97	Hardware Function
0C20	A7	Hardware Function
0C28	B7	Hardware Function
0C30	C7	Hardware Function
0C38	D7	Hardware Function
0C40	E7	Hardware Function
0C48	F7	Hardware Function
0C50	18	Hardware Function
0C58	28	Hardware Function
0C60	38	Hardware Function
0C68	48	Hardware Function
0C70	58	Hardware Function
0C78	68	Hardware Function
0C80	78	Hardware Function
0C88	88	Hardware Function
0C90	98	Hardware Function
0C98	A8	Hardware Function
0CA0	B8	Hardware Function
0CA8	C8	Hardware Function
0CB0	D8	Hardware Function
0CB8	E8	Hardware Function
0CC0	F8	Hardware Function
0CC8	19	Hardware Function
0CD0	29	Hardware Function
0CD8	39	Hardware Function
0CE0	49	Hardware Function
0CE8	59	Hardware Function
0CF0	69	Hardware Function
0CF8	79	Hardware Function
0D00	89	Hardware Function
0D08	99	Hardware Function
0D10	AA	Hardware Function
0D18	BA	Hardware Function
0D20	CA	Hardware Function
0D28	DA	Hardware Function
0D30	EA	Hardware Function
0D38	FA	Hardware Function
0D40	00	Hardware Function
0D48	10	Hardware Function
0D50	20	Hardware Function
0D58	30	Hardware Function
0D60	40	Hardware Function
0D68	50	Hardware Function
0D70	60	Hardware Function
0D78	70	Hardware Function
0D80	80	Hardware Function
0D88	90	Hardware Function
0D90	A0	Hardware Function
0D98	B0	Hardware Function
0DA0	C0	Hardware Function
0DA8	D0	Hardware Function
0DB0	E0	Hardware Function
0DB8	F0	Hardware Function
0DC0	11	Hardware Function
0DC8	21	Hardware Function
0DD0	31	Hardware Function
0DD8	41	Hardware Function
0DE0	51	Hardware Function
0DE8	61	Hardware Function
0DF0	71	Hardware Function
0DF8	81	Hardware Function
0E00	91	Hardware Function
0E08	A1	Hardware Function
0E10	B1	Hardware Function
0E18	C1	Hardware Function
0E20	D1	Hardware Function
0E28	E1	Hardware Function
0E30	F1	Hardware Function
0E38	12	Hardware Function
0E40	22	Hardware Function
0E48	32	Hardware Function
0E50	42	Hardware Function
0E58	52	Hardware Function
0E60	62	Hardware Function
0E68	72	Hardware Function
0E70	82	Hardware Function
0E78	92	